

IN THE CLAIMS:

Please amend the Claims as follows:

1. (Cancelled)
- 2-5. (Withdrawn)
6. (Currently amended) An aircraft comprising:

at least one airfoil having a leading edge and a trailing edge; and
a plurality of pulse detonation engines distributed along one of said
leading and trailing edges of said airfoil and positioned beneath said airfoil, each pulse
detonation engine being adapted for impulsively detonating a fuel/oxidizer mixture to
generate a thrust force and to apply the thrust force to said aircraft,
wherein at least one of said pulse detonation engines is movably
configured for altering a direction of the thrust force relative to said airfoil, and
[[,]] wherein at least two of said pulse detonation engines are configured
to impulsively detonate the fuel/oxidizer mixtures out of phase.
7. (Original) The aircraft of Claim 6, further comprising a plurality
of connectors, each of said connectors being configured to connect two of said pulse
detonation engines to facilitate cross-fire initiation between said two pulse detonation
engines.
8. (Currently amended) The aircraft of Claim [[1,]] 6 further
comprising a control means for selectively activating and deactivating at least one of said
pulse detonation engines.
9. (Original) The aircraft of Claim 8, wherein said control means is
configured for selectively activating and deactivating each of said pulse detonation
engines.
10. (Currently amended) The aircraft of Claim [[1]] 6, comprising at
least two airfoils, each airfoil having a leading edge and a trailing edge, wherein said
pulse detonation engines are distributed along one of said leading and trailing edges of
each of said airfoils and are positioned below each of said airfoils.
- 11-15. (Withdrawn)

16. (Currently amended) ~~[[The]]~~ An aircraft of Claim 1, comprising:
at least one airfoil having a leading edge and a trailing edge; and
a plurality of pulse detonation engines distributed along one of said
leading and trailing edges of said airfoil and positioned beneath said airfoil, each pulse
detonation engine being adapted for impulsively detonating a fuel/oxidizer mixture to
generate a thrust force and to apply the thrust force to said aircraft,

wherein at least one of said pulse detonation engines is movably
configured for altering a direction of the thrust force relative to said airfoil, wherein each
of said pulse detonation engines comprises an inlet for receiving oxidizer, an outlet for
exhausting an exhaust flow, and a PDE body extending between said inlet and said outlet,
wherein at least one of said inlet and said outlet has an elliptical cross-sectional area with
a semi-major axis oriented along said airfoil, and wherein the semi-major axis is greater
than a semi-minor axis of said outlet.

17. (Original) The aircraft of Claim 16, wherein said PDE body has a
cross-sectional area that increases from a smaller cross-sectional area at said inlet to a
larger cross-sectional area at said outlet.

18. (Previously presented) The aircraft of Claim 16, wherein each of
said inlet and said outlet have an elliptical cross-sectional area with the semi-major axis
oriented along said airfoil, and wherein the semi-major axis of said inlet is greater than a
semi-minor axis of said inlet.

19. (Currently amended) The aircraft of Claim ~~[[1]]~~ 6, wherein each of
said pulse detonation engines comprises an inlet for receiving oxidizer, an outlet for
exhausting an exhaust flow, and a PDE body extending between said inlet and said outlet,
wherein said PDE body has a cross-sectional area that decreases from a larger cross-
sectional area at said inlet to a smaller cross-sectional area at said outlet.

20. (Currently amended) The aircraft of Claim ~~[[1,]]~~ 6 further
comprising a plurality of separators extending from said airfoil and beneath said airfoil,
each of said separators being in intimate contact with at least one of said pulse detonation
engines, and at least one of said separators being in intimate contact with two of said
pulse detonation engines.

21-31. (Withdrawn)